Anti-P2Y12 Antibody [PSH04-48]

HA722133

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Cynomolgus monkey, Pig
Applications:	IHC-P, IHC-Fr, IF-Tissue
Molecular Wt:	Predicted band size: 39 kDa
Clone number:	PSH04-48

Description: P2Y12 is a chemoreceptor for adenosine diphosphate (ADP) that belongs to the Gi class of a group of G protein-coupled (GPCR) purinergic receptors. This P2Y receptor family has several receptor subtypes with different pharmacological selectivity, which overlaps in some cases, for various adenosine and uridine nucleotides. The P2Y12 receptor is involved in platelet aggregation and is thus a biological target for the treatment of thromboembolisms and other clotting disorders. Two transcript variants encoding the same isoform have been identified for this gene. In the field of purinergic signaling, the P2Y12 protein on the periphery is found mainly but not exclusively on the surface of blood platelets, and is an important regulator in blood clotting. In the central nervous system, this receptor has been found expressed exclusively on microglia, where it is necessary for physiological and pathological microglial actions, such as monitoring neuronal functions and microglial neuroprotection.

Immunogen: Synthetic peptide.

Positive control: Human brain tissue, mouse brain tissue, rat brain tissue, mouse cerebrum tissue, mouse hippocampus tissue, rat cerebrum tissue.

Subcellular location: Cell membrane.

Database links: SwissProt: Q9H244 Human | Q9CPV9 Mouse | Q9EPX4 Rat

Recommended Dilutions:

IHC-P	1:1,000
IHC-Fr	1:1,000-1:2000
IF-Tissue	1:500

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

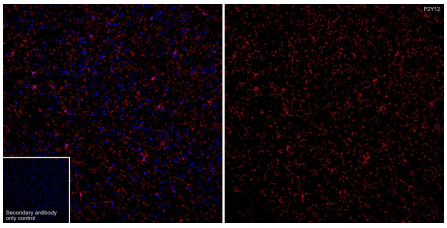

Fig1: Application: IHC-Fr

Species: Mouse

Site: Cerebral cortex

Sample: Frozen section

Antibody concentration: 1:2,000

Antigen retrieval: Not required

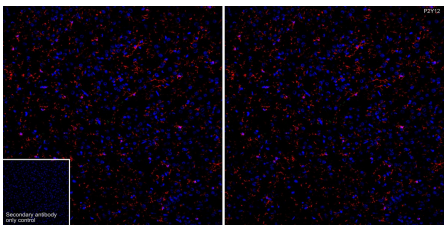

Fig2: Application: IHC-Fr

Species: Rat

Site: Cerebral cortex

Sample: Frozen section

Antibody concentration: 1:2,000

Antigen retrieval: Not required

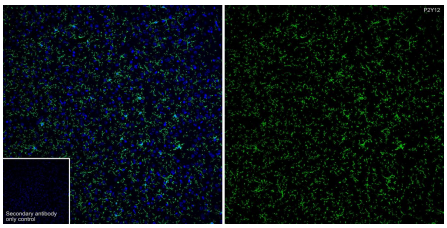

Fig3: Application: IF-tissue

Species: Mouse

Site: Cerebral cortex

Sample: Paraffin-embedded section

Antibody concentration: 1:500

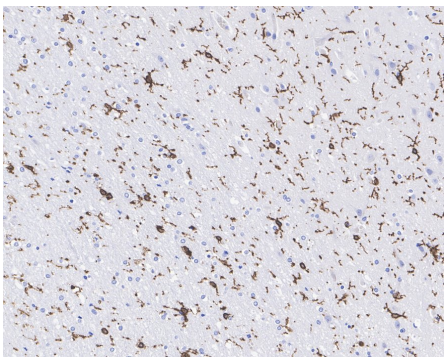

Fig4: Immunohistochemical analysis of paraffin-embedded human brain tissue with Rabbit anti-P2Y12 antibody (HA722133) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA722133) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

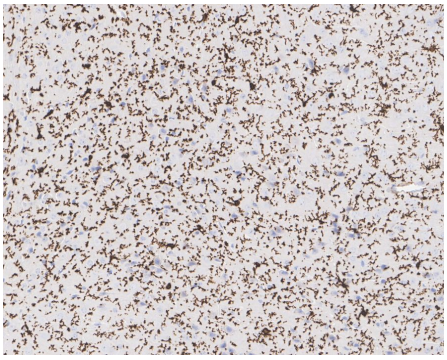

Fig5: Immunohistochemical analysis of paraffin-embedded mouse brain tissue with Rabbit anti-P2Y12 antibody (HA722133) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA722133) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

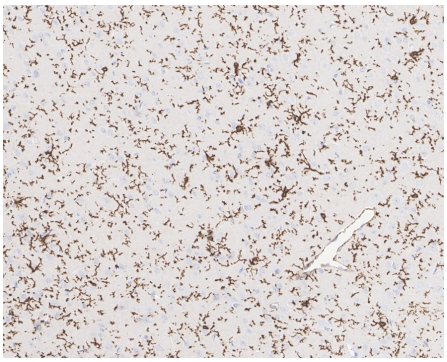

Fig6: Immunohistochemical analysis of paraffin-embedded rat brain tissue with Rabbit anti-P2Y12 antibody (HA722133) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA722133) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Chen J et al. P2Y12 inhibitor clopidogrel inhibits renal fibrosis by blocking macrophage-to-myofibroblast transition. Mol Ther. 2022 Sep
2. Rolling CC et al. P2Y12 Inhibition Suppresses Proinflammatory Platelet-Monocyte Interactions. Thromb Haemost. 2023 Feb